

Notice of Allowability

Application No.

09/930,698

Applicant(s)

FLAM, RAN J.

Examiner

Anh Ly

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/28/2006.
2. ☒ The allowed claim(s) is/are 1, 3, 5, and 7-20 (renumbered as 1-17).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

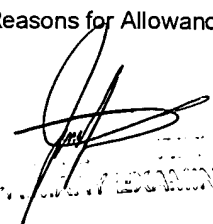
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/28/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


EXAMINER

DETAILED ACTION

1. This Office Action is response to Applicant's Amendment filed on 12/28/2005.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Gordon E. Nelson on Monday, 02/27/2006 via telephone @ (978) 948-7632.

The application has been amended as follows:

Claim 1:

1. (currently amended) A process control system comprising:

a server ~~that has~~ to access to a database system and executes program code for the process control system;

a ~~table of~~ process record table in the database system that contains one or more process records, each ~~the~~ process record indicating a current status of a process being controlled by the system;

~~a table of administrative query records~~ an administrative query table in the database system that contains one or more administrative query records, each the administrative query record specifying an administrative query that is

Art Unit: 2162

associated with a query on the table of process records and with ~~an~~ one or more administrative activities;

a program sequence table in the database system that contains one or more program sequence records that are associated with the administrative queries, the program sequence record specifying an administrative activity, a way of determining a next program sequence record in the set, and a condition which must be satisfied before the administrative activity specified therein can be performed;

a log table in the database system that ~~has~~ contains one or more log table records logging executions of the query administrative queries and result sets of process records returned thereby, the log table records including a next sequence pointer for a given execution of an administrative query and a given process record, the next sequence pointer specifying a next program sequence record and the log table record permitting determination whether a record belonging to a current result set returned by a current execution of a given administrative query is in one of a plurality of states; and

a portion of the program code which, when executed, selects one of the administrative queries for execution, executes the query associated therewith, determines which state a process record belonging to the current result set is in, ~~and, as determined by~~ if the state and the condition specified by the program sequence record so indicate, performs one of the associated administrative activities with regard to the process record, and responds when a process record is again returned by a subsequent execution of the administrative query by

Art Unit: 2162

performing the administrative activity specified in the program sequence record specified by the next record pointer if the state of the process record and the condition specified by the program sequence record so indicate, and if the administrative activity is performed, setting the next sequence pointer as specified in the program sequence record.

Claim 4:

4. (cancelled) (cancel claim 4)

Claim 5:

5. (currently amended) The process control system set forth in claim 4- 1

wherein:

Claim 6:

6. (cancelled) (cancel claim 6)

Claim 7:

7. (currently amended) The process control system set forth in claim 6 1

wherein: the specific specified condition is temporal.

Art Unit: 2162

3. Claims 4 and 6 have been cancelled.
4. Claims 1, 3, 5, and 7-20 are allowed.

Allowable Subject Matter

5. The present application has been thoroughly reviewed. Upon searching a variety of databases, the examiner respectfully submits that claims 1, 3, 5 and 7-20 are allowed in light of the applicants' argument and in light of the prior arts of made record.

6. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed to process control system that automatically monitor processes and performs activities based on conditions detected during monitoring. An administrative query table has records that define administrative queries. A activity is a set one or more actions and a plurality of activities may be associated with the administrative query, with the activity to be performed being selected on the basis of a state of a given process record with regard to the query.

The closest prior arts, Nixon et al. (hereinafter Nixon) of Pub. No.: US 20030004952 teaches a server accessing to a database system, executing software application including a plurality of program codes for the process control system and keep tracking of current status of the process and storing them in a database table and the quest or query to the process control system for process record is performed and stored in the database table. While Agrusa et al. (hereinafter Agrusa) of Pub. No.: 2005/0038885 teaches executing program code

Art Unit: 2162

including a portion of line of code for requesting or querying and performing the program code to produce the result associated to the query.

Thus, in combination, Nixon and Agrusa fail to teach "a program sequence table in the database system that contains one or more program sequence records that are associated with administrative queries, ... and a log table in the database system that contains one or more log records logging executions of the administrative queries and set of process record returned."

These distinct features, in conjunction with all other limitations of the dependents and independent claims render claims 1, 3, 5, and 7-20 allowable.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Art Unit: 2162

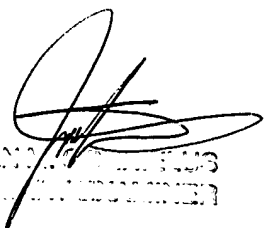
Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to **(571) 273-4039**

(Examiner's fax number). The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or **Primary Examiner Jean Corrielus (571) 272-4032**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: **Central Fax Center: (571) 273-8300**

ANH LY 
FEB. 28th, 2006


JOHN BREENE
SUPERVISOR